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# UNIVERSITY

OF

# PENNSYLVANIA

CATALOGUE FOR SESSION 1885-86

AND

ANNOUNCEMENT FOR SESSION 1886-7.

# Department of Dentistry.

SEP 2 7 1961 PHILADELPHIA

ONIVERSITY OF THE UNIVERSITY
1885



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OF

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# GROUND PLAN OF THE UNIVERSITY. CLEVELAND AVE COLLEGE BUILDINGS. I. College Hall. 2. Medical Hall. 3. Medical and Dental Laboratory. 4. Hospital. 5. Wing for Chronic Diseases. RDIA 6. Laundry & Machine Shop. 7. Veterinary College. 8. Veterinary Hospital. 9. Biological Hall. 10. Athletic Grounds. 11. Photographic Studio. VOODLAN ROUTES OF ACCESS. Market St., and Chestnut &! Walnut Sts. P. R. R. B Lombard and South South St. P. R. R. Also South St. Station of P. W. & B. R. R. THE BUILDINGS AND PROPERTY.

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## CALENDAR.

	1885.	
Sept.	15, Tuesday.	First Term begins: College Department and Depart-
		ment of Biology. 10 A.M.
Oct.	1, Thursday.	Winter Session begins: Departments of Medicine,
		Law, Dentistry and Veterinary Medicine.
"	5, Monday.	First Term begins: Department of Music and Aux-
		iliary Department of Medicine.
	26, Thursday.	Thanksgiving Day. (Holiday.)
Dec.	24, Thursday.	Christmas Recess begins.
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	1886.	CHRISTMAS RECESS.
Jan.	4, Monday.	Christmas Recess ends. 9 A.M.
"	28, Thursday.	Mid-Year Examinations end: College Department.
"	29, Friday.	First Term ends: College Department (Chapel at
73.1	1 35 1	10 A.M.) and Department of Law.
Feb.	1, Monday.	Second Term begins: College Department, and Departments of Biology and Law.
April	12, Monday.	Final and Term Examinations begin: Departments
		of Medicine and Dentistry.
"	21, Wednesday.	Examination for Resident Physicians, University
		Hospital. 12 Noon.
"	21, Wednesday.	Easter Recess begins: College Department, 5 P.M.
"	23, Friday.	Good Friday. (Legal Holiday.)
		Easter Recess.
"	27, Tuesday.	Easter Recess ends: College Department. 9 A.M.
		Examination for Resident Physicians, University
		Hospital.
May	1, Saturday.	Annual Commencement: Departments of Medicine
		and Dentistry. 12 Noon.
"	10, Monday.	Spring Session opens: Departments of Medicine and
,,		Dentistry. 11 A.M.
"	14, Friday.	Senior Examinations, College Department, end.
.,	20, Thursday.	Examinations begin: Department of Law and Aux-
"	01 35 1	iliary Department of Medicine.
-	31, Monday.	Second Term ends: Department of Law.

1, " 4, Monday.

June	14, Monday.	Announcement of Results, Annual Examinations:
		College Department. 10 A.M.
"	15, Tuesday.	Annual Commencement: College Department, Departments of Law and Biology, and Auxiliary Department of Medicine. 11 A.M.
	16 to 23.	Entrance Examinations: College Department.
		9 A.M. each day.
		SUMMER VACATION.
Sept.	7 to 12.	Entrance Examinations: College Department. 9 A.M. each day.
"	15, Wednesday.	First Term begins: College Department and De-
		partment of Biology. 10 A.M.
"	16, Thursday.	Introductory Course opens: Departments of Medicine, and Dentistry. 11 A.M.
"	24, Friday.	Competitive Examination for Medical Scholarships. 12 Noon.
"	28, Tuesday.	Examinations for Admission to Advanced Standing, and Re-examination of Undergraduates, Departments of Medicine and Dentistry. 12 Noon.
"	29, Wednesday.	Entrance Examination: Departments of Medicine and Veterinary Medicine. 12 Noon.
Oct.	1, Friday.	Winter Session opens: Departments of Medicine, Dentistry and Veterinary Medicine. 12 Noon.

First Term begins: Department of Law.

iliary Department of Medicine.

First Term begins: Department of Music and Aux-

# University of Pennsylvania.

A pamphlet, called: Proposals Relative to the Education of Youth in Pennsylvania, written in 1749 by Dr. Franklin, led to an association, by certain citizens of Philadelphia, for the purpose of founding a School on the lines suggested by that wise counsellor. Over two thousand pounds, equivalent to at least forty thousand dollars at the present time, were raised and a building, which had been erected to accommodate the thronged congregations of the celebrated Whitfield, was purchased, and in 1751 the Academy, consisting of an English, a Mathematical, and a Latin School, each under a Master, with subordinate tutors and ushers, was formally opened. So successful was the undertaking that in two years the Trustees applied to the Proprietaries for a Charter, which was thus granted:—

THOMAS PENN and RICHARD PENN, true and absolute proprietors and governors in chief of the province of Pennsylvania and counties of Newcastle, Kent, and Sussex, on Delaware, To all persons to whom these presents shall come, greeting: Whereas, the well-being of a society depends on the education of their youth, as well as, in great measure, the eternal welfare of every individual, by impressing on their tender minds principles of morality and religion, instructing them in the several duties they owe to the society in which they live, and one towards another, giving them the knowledge of languages, and other parts of useful learning necessary thereto, in order to render them serviceable in the several public stations to which they may be called. And whereas, it hath been represented to us by Thomas Lawrence, William Allen, John Inglis, Tench Francis, William Masters, Lloyd Zachary, Samuel M'Call, junior, Joseph Turner, Benjamin Franklin, Thomas Leech, William Shippen, Robert Strettell, Philip Syng, Charles Willing, Phineas Bond, Richard Peters, Abraham Taylor, Thomas Bond, Joshua Maddox, William Plumstead, Thomas White, William Cole-

man, Isaac Norris, and Thomas Cadwalader, of our city of Philadelphia. gentlemen, that for the erecting, establishing, and maintaining an academy within our said city, as well to instruct youth for reward, as poor children whose indigent and helpless circumstances demand the charity of the opulent part of mankind, several benevolent and charitable persons have generously paid, and by subscriptions promised hereafter to pay, into their hands as trustees, for the use of the said academy, divers sums of money, which sums already paid, they, the said trustees, have expended in the purchase of lands well situated, and a building commodious for the uses aforesaid, within our said city in maintaining an academy there as well for the instruction of poor children on charity, as others whose circumstances have enabled them to pay for their learning, for some time past, and in furnishing the said academy with books, maps, mathematical instruments, and other necessaries of general use therein, according to the intentions of the donors. And whereas, the said trustees to facilitate the progress of so good a work, and to perfect and perpetuate the same, have humbly besought us to incorporate them and their successors.

Now know ye, That we favouring such pious, useful, generous, and charitable designs, hoping, through the favour of Almighty God, this academy may prove a nursery of virtue and wisdom, and that it will produce men of dispositions and capacities beneficial to mankind in the various occupations of life; but more particularly suited to the infant state of North America in general, and for other causes and considerations us hereto specially moving, have granted, ordained, declared, constituted, and appointed, and by these presents we do, for us, our heirs, and successors grant, ordain, declare, constitute, and appoint, That the said Thomas Lawrence, and others, as before recited, and such others, as shall be from time to time chosen, nominated or elected in their place and stead, shall be one community, corporation and body politic, to have continuance for ever, by the name of The Trustees of the Academy and Charitable School in the Province of Pennsylvania.

In witness whereof, we have caused these our letters to be made patent; in the twenty-seventh year of the reign of our sovereign lord, George the Second, who now is king of Great Britain, France, and Ireland, &c., and in the year of our Lord, one thousand seven hundred and fifty-three."

Under the skillful training of the learned Rev. William Smith the highest class in this Academy attained that proficiency which, in a College course, would entitle it to a Degree. Accordingly, two years later the Proprietaries were again petitioned to convert the Academy into a College with the power of conferring Collegiate Degrees. The petition was granted substantially as follows

Thomas Penn and Richard Penn, true and absolute proprietaries of the province of Pennsylvania, etc., to all persons to whom these presents shall come, greeting:

And whereas the said trustees have, . . . . represented, That since our granting our said recited charter, the academy therein mentioned, by the blessing of Almightv God, is greatly improved, being now well provided with masters, not only in the learned languages, but also in the liberal arts and sciences, and that one class of hopeful students has now attained to that station in learning and science, by which, in all well constituted seminaries, youth are entitled to their first degree. Now know ye also, That we do hereby, for us, our heirs and successors, give and grant full power and authority to the said trustees and their successors, . . . . to constitute and appoint a Provost and Vice-Provost of the said college and academy, who shall be severally named and styled Provost and Vice-Provost of the same. And also to nominate and appoint professors in all the liberal arts and sciences, the ancient languages and the English tongue, which Provost, Vice-Provost, and Professors, so constituted and appointed, shall be known and distinguished as one body and faculty, by the name of The Provost, Vice-Provost, and Professors of the College and Academy of Philadelphia, in the province of Pennsylvania; and by that name shall be capable of exercising such powers and authorities as the said trustees and their successors shall think necessary to delegate to them, for the discipline and government of the said college, academy, and charitable school: Provided always, That the said trustees, the Provost, and Vice-Provost, and each Professor, before they shall exercise their several and respective powers or authorities, offices, and duties, do and shall take and subscribe the three first written oaths appointed to be taken and subscribed, in and by one act of Parliament, passed in the first year of the reign of our late sovereign lord, George the first, intituled, An Act for the further security of his Majesty's Person and Government; and the Succession of the Crown in the Heirs of the late Princess Sophia, being protestants, and for extinguishing the hopes of the pretended Prince of Wales, and his open and secret abettors; and shall also make and subscribe the declaration appointed to be made and subscribed by one other act of parliament, passed in the twenty-fifth year of the reign of king Charles the second, intituled, An Act for preventing dangers which may happen, etc. . . . . . . . . excepting only the people called Quakers, who, upon taking, making, and subscribing the affirmations and declarations appointed to be taken, made, and subscribed, by the acts of General Assembly of the province of Pennsylvania, to qualify them for the exercise of civil offices, shall be admitted to the exercise of all and every the powers, authorities, offices, and duties

above mentioned, any thing in this provision to the contrary notwithstanding . . . . And we do hereby, at the desire and request of the said trustees, constitute and appoint the Reverend William Smith, M.A., to be the first and present Provost of the said college and academy, and the Reverend Francis Allison, M.A., to be the first and present Vice-Provost of the same . . . . And we do further, for us, our heirs and successors, give and grant to the trustees of the said college and academy, That for animating and encouraging the students thereof to a laudable diligence, industry, and progress in useful literature and science, they and their successors, met together on such day or days as they shall appoint for that purpose, shall have full power and authority, by the provost, . . . . to admit any the students within the said college and academy, or any other person or persons meriting the same, to any degree or degrees, in any of the faculties, arts, and sciences, to which persons are usually admitted, in any or either of the universities or colleges in the kingdom of Great Britain. . . . . Provided always, and it is hereby declared to be our true meaning and express will, That no student or students, within the said college and academy, shall ever, or at any time or times hereafter, be admitted to any such degree or degrees, until such student or students have been first recommended and presented as worthy of the same, by a written mandate, given under the hands of at least thirteen of the trustees of the said college and academy . . . . .

In testimony whereof, we have caused these our letters to be made patent, and the great seal of our said province to be hereunto affixed . . . . . this fourteenth day of May, in the twenty-eighth year of the reign of our sovereign lord, George the second, king of Great Britain, France, and Ireland, etc., and in the year of our Lord, one thousand seven hundred and fifty-five.

The First Commencement was held May 17th, 1757, when Paul Jackson, Jacob Duché, Francis Hopkinson, Samuel Magaw, Hugh Williamson, James Latta, and John Morgan received the Degree of Bachelor of Arts. In the agitated times which followed, the Provost, Mr. Smith, was a Tory of so pronounced a type that he was thrown into prison by the Legislature; but, in faithfulness to his sworn duties as Provost, he received his classes in gaol, and continued his instructions to them there while still a prisoner. He was set at liberty, however, for the purpose of going to England to make a personal appeal to the king, and his kindly reception there was not lessened by the strain to which his loyalty at home had been put. Oxford conferred on him the Degree of Doctor of Divinity. On his return home so highly did his fellow-citizens rate his influence abroad, that when in 1761 the Trustees were hard bestead they sent him back to England to raise funds for an endowment. It happened that King's College (now

Columbia) in New York was in similar straits and had resolved on similar efforts. The two commissioners met in England and amicably resolved to "divide the land between them," and share the proceeds. Through the influence of the Archbishop of Canterbury they received a circular letter from the king to all churches, and succeeded in raising a very considerable endowment for each college.

On Dr. Smith's return, as it appears on the minutes of the 14th of June, 1764, a letter was received from the Archbishop of Canterbury, Thomas and Richard Penn, and the Rev. Samuel Chandler, D.D., addressed to the trustees, in which the trustees are congratulated on the success of Dr. Smith's, the provost's, collection, in England, and advised of what would be further necessary to the due improvement of the collection and the future prosperity of the institution. "That the institution was originally founded and carried on for the general benefit of a mixed body of people—that on the king's brief it is represented as a seminary that would be of great use for securing capable instructors and teachers, as well for the service of the society for propagating the gospel in foreign parts, as for other protestant denominations in the colonies.—That at the time of making the collection, the provost was a clergyman of the Church of England—the vice-provost, a Presbyterian-a principal professor, a Baptist, with other useful professors and tutors, all carrying on the education of youth with great harmony, and people of various denominations have heretofore contributed liberally and fully.—That jealousies had arisen lest the foundation should be narrowed, and some party exclude the rest, or put them on a worse footing than they have been or were at the time of the collection, which would be unjust and productive of contentions unfriendly to religion. It was therefore recommended to the trustees, by the writers of the letter (who had a principal share in procuring the collection), to make a fundamental rule or declaration, to prevent inconvenience of this kind; and in doing which, they were advised that the more closely they kept in view the plan on which the seminary was at the time of the royal brief, and on which it was carried on from the beginning, so much the less cause would any party have to be dissatisfied."

A committee having been appointed to frame a fundamental *Resolve* or declaration, in consequence of the letter, the following was reported and adopted:

"The trustees being ever desirous to promote the peace and prosperity of this seminary, and to give satisfaction to all its worthy benefactors, have taken the above letter into their serious consideration, and perfectly approving the sentiments therein contained, do order the same to be inserted

their books, that it may remain perpetually declaratory of the present

wide and excellent plan of this institution, which hath not only met with the approbation of the great and worthy personages above mentioned, but even the royal patronage of his majesty himself. They further declare that they will keep this plan closely in their view, and use their utmost endeavors that the same be not narrowed, nor the members of the church of England, or those dissenting from them (in any future election to the principal offices mentioned in the aforesaid letter), be put on any worse footing in this seminary, than they were at the time of obtaining the royal brief. They subscribe this with their names, and ordain that the same be read and subscribed by every new trustee that shall hereafter be elected, before he takes his seat at the board."

Perhaps no more striking instance can be given of the distortion to which men's minds were subject in those days of political commotion, than the fact that in 1779 this resolution was construed by the Legislature into a "narrowing of the foundation," and seized as a pretext for confiscating all the rights and properties of the College, which were bestowed upon a new organization called in its charter the "Trustees of the University of the State of Pennsylvania." Ten years later, these rights and properties were all restored, and in 1791 an act was passed amalgamating the old College in the new University, as follows:

WHEREAS, the trustees of the University of the State of Pennsylvania, and the trustees of the College, Academy, and Charitable School of Philadelphia, in the commonwealth of Pennsylvania, by their several petitions have set forth, that they have agreed to certain terms of union of the said two institutions, which are as follow:

First. That the name of the institution be "The University of Pennsylvania," and that it be stationed in the city of Philadelphia.

Second. That each of the two boards shall elect, from among themselves, twelve persons, who, with the governor for the time being, shall constitute the board of trustees of the university of Pennsylvania; and that the governor shall be president.

Sect. 2. And be it further enacted, That the said twenty-four persons so elected and certified, together with the governor for the time being, who shall always be president, and their successors, be, and they are hereby made and constituted a corporation and body politick, in law and in fact, to have continuance for ever by the aforesaid name, style, and title of "The Trustees of the University of Pennsylvania," and that the said university shall at all times be stationed in the city of Philadelphia.

Thus established, the University has advanced with the times, and now comprises the following departments:—

THE COLLEGE DEPARTMENT, including

THE COURSE IN ARTS,

THE TECHNICAL COURSES IN SCIENCE, (The Towne Scientific School),

A COURSE IN PHILOSOPHY,

THE COURSE IN FINANCE AND ECONOMY, (The Wharton School),

THE COURSE IN MUSIC.

THE DEPARTMENT OF MEDICINE.

THE DEPARTMENT OF LAW.

THE AUXILIARY DEPARTMENT OF MEDICINE.

THE DEPARTMENT OF DENTISTRY.

THE DEPARTMENT OF PHILOSOPHY.

THE DEPARTMENT OF VETERINARY MEDICINE.

THE DEPARTMENT OF BIOLOGY.

THE DEPARTMENT OF PHYSICAL EDUCATION.

# PROVOST OF THE UNIVERSITY, WILLIAM PEPPER, M.D., LL.D.,

President pro tempore of the Board of Trustees.

## TRUSTEES.

THE GOVERNOR OF PENNSYLVANIA, ex-officio President of the Board.

REV. HENRY J. MORTON, D.D., FREDERICK FRALEY, LL.D., REV. CHARLES W. SCHAEFFER, D.D., JOHN WELSH, LL.D., RT. REV. WILLIAM BACON STEVENS, D.D., LL.D., JOHN ASHHURST, WILLIAM SELLERS, REV. RICHARD NEWTON, D.D., J. VAUGHAN MERRICK, FAIRMAN ROGERS, RICHARD WOOD, S. WEIR MITCHELL, M.D., JOSHUA B. LIPPINCOTT, CHARLES C. HARRISON, JAMES H. HUTCHINSON, M.D., REV. GEORGE DANA BOARDMAN, D.D., WILLIAM HUNT, M.D., HORACE HOWARD FURNESS, LL.D., WHARTON BARKER, SAMUEL DICKSON, JOHN SCOTT,

JAMES MACALISTER, JOHN C. SIMS, Jr., HENRY H. HOUSTON.

REV. JESSE Y. BURK, Secretary, University. WHARTON BARKER, Treasurer, 125 South Fourth-st.

# CHAIRMEN OF STANDING COMMITTEES FOR THE YEAR 1885-6.

WAYS AND MEANS: . . . . . . . . . . . MR. WELSH, 304 Walnut-st. Buildings, Estates and Property: Mr. LIPPINCOTT, 715 Market-st.

LIBRARY: . . . . . DR. FURNESS, 222 West Washington Square.

DEPARTMENT OF ARTS: . . . . MR. FRALEY, 1000 Walnut-st.

DEPARTMENT OF MEDICINE: . . DR. MITCHELL, 1524 Walnut-st.

DEPARTMENT OF LAW: . . . . MR. SCOTT, 3813 Chestnut-st.

DEPARTMENT OF SCIENCE: . . . . . . MR. MERRICK, Roxboro'.

DEPARTMENT OF FINANCE AND ECONOMY: MR. BARKER, 28 S.

Third-st.

DEPARTMENT OF VETERINARY MEDICINE: Mr. LIPPINCOTT, 715 Market-st.

DEPARTMENT OF PHYSICAL EDUCATION: . . . Mr. DICKSON, 32 S. . . Third-st.

DEPARTMENT OF BIOLOGY: . . . . . . MR. MERRICK, Roxboro'.

## **OFFICERS.\***

Residence. WILLIAM PEPPER, M.D., LL.D., PROVOST OF THE UNIVERSITY. 1811 Spruce-st. E. OTIS KENDALL, LL.D., VICE-PROVOST. 3826 Locust-st. JOSEPH LEIDY, M.D., LL.D., Professor of Anatomy. 1302 Filbert-st. HENRY H. SMITH, M.D., Emeritus Professor of Surgery. 1800 Spruce-st. FRANCIS A. JACKSON, A.M., Professor of the Latin Language and Literature. University. E. OTIS KENDALL, LL.D., THOMAS A. SCOTT Professor of Mathematics. 3826 Locust-st. J. PETER LESLEY, LL.D., Emeritus Professor of Geology and Mining. 1008 Clinton-st. P. PEMBERTON MORRIS, A.M., Emeritus Professor of Practice, Pleading, and Evidence at Law and in Equity. 404 Locust-st. RICHARD A. F. PENROSE, M.D., LL.D., Professor of Obstetrics and of the Diseases of Women and Children. 1331 Spruce-st. ALFRED STILLÉ, M.D., LL.D., Emeritus Professor of the Theory and Practice of Medicine, and of Clinical Medicine. 3900 Spruce-st. HARRISON ALLEN, M.D., 117 S. 20th-st. Emeritus Professor of *Physiology*. HORATIO C. WOOD, M.D., LL.D., Professor of Materia Medica, Pharmacy, and General Therapeutics, and Clinical Professor of Nervous Dis-1925 Chestnut-st. eases. JOHN J. REESE, M.D., Professor of Medical Jurisprudence, including Toxi-3710 Walnut-st cology.

<sup>\*</sup> The names are given in the order of accession to office.

32 S. 3d-st.

3332 Chestnut-st.

CHARLES J. STILLÉ, LL.D., Emeritus John Welsh Centennial Professor of History and English Literature. 2201 St. James's Place. OSWALD SEIDENSTICKER, Ph.D. (Göttingen), Professor of the German Language and Literature. 1016 Cherry-st. JOHN G. R. McELROY, A.M., Professor of Rhetoric and the English Language. 115 S. 20th-st. J. I. CLARK HARE, LL.D., Professor of the Institutes of Law, including, inter alia, International, Constitutional, Commercial, and Civil Law. 118 S. 22d-st. D. HAYES AGNEW, M.D., LL.D., JOHN RHEA BARTON Professor of Surgery, and Professor of Clinical Surgery. 1611 Chestnut-st. REV. ROBERT E. THOMPSON, A.M., JOHN WELSH CENTENNIAL Professor of History and English Literature. Jenkintown, P.O. FREDERICK A. GENTH, Ph.D. (Marburg), Professor of Chemistry and Mineralogy. University. SAMUEL B. HOWELL, M.D., Professor of Mineralogy and Geology. 1513 Green-st. GEORGE F. BARKER, M.D., PH.B., Professor of Physics. 3909 Locust-st. E. COPPÉE MITCHELL, LL.D., Professor of the Law of Real Estate and Conveyancing and of Equity Jurisprudence. 518 Walnut-st. LEWIS M. HAUPT, A.M., C.E., Professor of Civil Engineering. University. WILLIAM PEPPER, M.D., LL.D., Professor of the Theory and Practice of Medicine and of Clinical Medicine. 1811 Spruce-st. WILLIAM GOODELL, M.D., Professor of Clinical Gynacology. 500 N. 20th-st. WILLIAM F. NORRIS, M.D., Clinical Professor of Diseases of the Eye. 1526 Locust-st. GEORGE STRAWBRIDGE, M.D., Clinical Professor of Diseases of the Ear. 1500 Walnut-st. JAMES PARSONS, A.M., Professor of the Law of Personal Relations and Per-

sonal Property.

THOMAS W. RICHARDS, A.M.,

Professor of Drawing and Architecture.

GEORGE A. KŒNIG, Ph.D. (Heidelberg),	
Assistant Professor of Chemistry.	3207 Summer-st.
SAMUEL P. SADTLER, Ph.D. (Göttingen),	
Assistant Professor of Chemistry.	204 N. 34th-st.
JAMES TYSON, M.D.,	
Professor of General Pathology and Morbid Anatomy.	1506 Spruce-st.
LOUIS A. DUHRING, M.D.,	
Clinical Professor of Skin Diseases.	1417 Spruce-st.
HUGH A. CLARKE,	
Professor of the Science of Music.	223 S. 38th-st.
FREDERICK A. MUHLENBERG, D.D.,	
Professor of the Greek Language and Literature.	4307 Walnut-st.
JOSEPH T. ROTHROCK, M.D., B.S.,	
	West Chester, Pa.
WILLIAM D. MARKS, Ph.B., C.E.,	•
WHITNEY Professor of Dynamical Engineering.	4304 Walnut-st.
THEODORE G. WORMLEY, M.D., LL.D.,	
Professor of Chemistry and Toxicology.	University.
JOHN ASHHURST, Jr., M.D.,	
	De Lancey Place.
OTIS H. KENDALL, A.M.,	·
Assistant Professor of Mathematics.	3826 Locust-st.
JOSEPH G. RICHARDSON, M.D.,	
Professor of Hygiene.	3238 Chestnut-st.
CHARLES J. ESSIG, M.D., D.D.S.,	
Professor of Mechanical Dentistry and Metallurgy.	1700 Locust-st.
EDWIN T. DARBY, M.D., D.D.S.,	
Professor of Operative Dentistry and Dental Histology.	4000 Chestnut-st.
ANDREW J. PARKER, M.D., Ph.D.,	
Professor of Comparative Anatomy and Zoology.	315 N. 9th-st.
MORTON W. EASTON, Ph.D.,	
Professor of Comparative Philology.	224 S. 43d-st.
JAMES TRUMAN, D.D.S.,	
Professor of Dental Pathology, Therapeutics, and Mater	$\dot{a}$
Medica.	3249 Chestnut-st.
FREDERICK A. GENTH, Jr., M.S.,	
Assistant Professor of Chemistry.	4014 Chestnut-st.
ALBERT S. BOLLES, Ph.D.,	
Professor of Mercantile Law and Practice.	Aldine Hotel.
RUSH SHIPPEN HUIDEKOPER, M.D., V.S. (Alfort	),
Professor of Veterinary Anatomy and Pathology.	111 S. 20th-st.

1829 Spruce-st.

University.

EDMUND J. JAMES, Ph.D. (Halle), Professor of Finance and Administration. 204 S. 41st st. JOHN BACH McMASTER, A.M., Professor of American History. University. GEORGE TUCKER BISPHAM, A.M., Professor of Practice, Pleading, and Evidence at Law and 402 Walnut-st. in Equity. ROBERT MEADE SMITH, M.D., Professor of Comparative Physiology. 332 S. 21st-st. HORACE JAYNE, M.D., Professor of Vertebrate Morphology. 1826 Chestnut-st. BENJAMIN SHARP, M.D., Ph.D. (Würzburg), Professor of Invertebrate Morphology. University. WILLIAM OSLER, M.D., Professor of Clinical Medicine. 131 S. 15th-st. EDWARD T. BRUEN, M.D., Assistant Professor of Physical Diagnosis. 1814 Rittenhouse Square. LOUIS STARR, M.D., Clinical Professor of Diseases of Children. 1922 Spruce-st. WILLIAM L. ZUILL, M.D., D.V.S., Professor of Surgical Pathology. University. REV. GEORGE S. FULLERTON, A.M., B.D., Adjunct Professor of Intellectual and Moral Philosophy. University. J. WILLIAM WHITE, M.D., Director of Physical Education, Demonstrator of Surgery, and Assistant Surgeon in University Hospital. 222 S. 16th-st. ROLAND G. CURTIN, M.D., Lecturer on *Physical Diagnosis*, and Asst. Physician in University Hospital. 22 S. 18th-st. CHARLES K. MILLS, M.D., Lecturer on Mental Diseases. 113 S. 19th-st. SAMUEL D. RISLEY, M.D., Instructor in Ophthalmology, and Ophth. Surgeon in University Hospital. 1630 Walnut-st. DE FOREST WILLARD, M.D., Lecturer on Orthopædic Surgery. 1818 Chestnut-st. ELLIOTT RICHARDSON, M.D., Lecturer on Clinical and Operative Obstetrics, and De-

monstrator of Operative Obstetrics.

monstrator of Practical Pharmacy.

Lecturer on Materia Medica and Pharmacy, and De-

ADOLPH W. MILLER, M.D.,

JOHN MARSHALL, M.D., NAT.Sc.D. (Tübingen), Demonstrator of Practical Chemistry. University. WILLIAM BARTON HOPKINS, M.D., Assistant Demonstrator of Surgery. 2018 Spruce-st. GEORGE A. PIERSOL, M.D., Demonstrator of Normal Histology. 1110 Spring Garden-st. HENRY F. FORMAD, M.D., Demonstrator of Pathological Histology and of Morbid Anatomy, Lecturer on Experimental Pathology, and Librarian of the Stillé Medical Library. 3535 Locust-st. WALTER M. L. ZIEGLER, M.D., Instructor in Otology, and Aural Surgeon in University 2007 Columbia Ave. Hospital. CARL SEILER, M.D., Instructor in Laryngology. 1346 Spruce-st. ALBERT L. A. TOBOLDT, M.D., Assistant Demonstrator of Practical Pharmacu. 207 Vine-st. HARRY R. WHARTON, M.D., Demonstrator of Clinical Surgery, and Assistant Surgeon in University Hospital. 1405 Locust-st. RICHARD H. HARTE, M.D., Demonstrator of Osteology, and Assistant Demonstrator of Surgery and Anatomy, and Assistant Surgeon in University Hospital. 332 S. 17th-st. ROBERT HUEY, D.D.S., Lecturer on Operative Dentistry. 330 S. 15th-st. WILLIAM DIEHL, D.D.S., Demonstrator of Operative Dentistry. 1513 Walnut-st. JOHN B. DEAVER, M.D., Demonstrator of Anatomy. 1610 Vine-st. FRANCIS X. DERCUM, M.D., Instructor in Nervous Diseases. 636 N. 8th-st. THOMAS R. NEILSON, M.D., Assistant Demonstrator of Anatomy and Surgery, and Instructor in Venereal Diseases. 346 S. 15th-st. EDMUND W. HOLMES, M.D., Assistant Demonstrator of Anatomy. 1523 Green-st. EDWARD T. REICHERT, M.D., Demonstrator of Experimental Physiology, and Lecturer on Physiology. University.

319 S. 18th-st.

JUDSON DALAND, M.D.,

Instructor in Clinical Medicine.

WILLIAM A. EDWARDS, M.D.,	
Instructor in Clinical Medicine.	1210 Spruce-st.
N. ARCHER RANDOLPH, M.D.,	
Assistant Demonstrator of Physiology, and Instruc	
Physiology.	University.
EDWIN S. CRAWLEY, B.S.,	
Instructor in Civil Engineering.	University.
WILLIAM L. CAVE, D.D.S.,	
Demonstrator of Mechanical Dentistry.	115 S. 17th-st.
J. JUDSON EDWARDS, D.D.S.,	
Assistant Demonstrator of Mechanical Dentistry.	38 N. 38th-st.
HENRY F. KELLER, B.S.,	
Assistant in Chemistry.	257 N. 6th-st.
HENRY A. WASMUTH, E.M.,	
Assistant in Geology and Mining.	3709 Woodland-Ave.
J. HENDRIE LLOYD, M.D.,	
Instructor in Electro-Therapeutics.	200 S. 40th-st.
A. SYDNEY ROBERTS, M.D.,	
Instructor in Orthopædic Surgery.	131 S. 15th-st.
J. P. CROZER GRIFFITH, M.D.,	
Assistant Demonstrator of Normal Histology.	110 S. 18th-st.
GEORGE E. DE SCHWEINITZ, M.D.,	
Prosector to the Professor of Anatomy.	1330 Spruce-st.
HENRY W. STELWAGON, M.D.,	-
Instructor in Dermatology.	223 S. 17th-st.
JAMES G. BARNWELL, A.M.,	
Librarian.	327 N. 9th-st.
JOHN S. ELLIOTT, B.S.,	
Assistant in Civil Engineering.	University.
LOUIS DU PONT SYLE, A.B.,	·
Instructor in English.	University.
EDWARD P. CHEYNEY, A.B., B.F.,	·
	cor. 41st and Ogden-st.
GOOLD H. BULL, Assistant Engineer U. S. N.,	
Instructor in Mechanical Engineering.	University.
ARTHUR W. GOODSPEED, B.A.,	v
Assistant in Physics.	University.
JOSEPH W. NOBLE, D.D.S.,	,
Assistant Demonstrator of Operative Dentistry.	1513 Walnut-st.
LUTHER H. GRAVES, D.D.S.,	
Assistant Demonstrator of Operative Dentistry.	1617 Chestnut-st.

ALEXANDER GLASS, V.S.,

Demonstrator of Veterinary Pharmacy.

2006 Bainbridge-st

SAMUEL G. DIXON,

Assistant Demonstrator of Physiology.

107 S. 21st-st.

ROBERT P. ROBINS, M.D.,

Instructor in Clinical Medicine.

2024 Locust-st.

WILLIAM L. TAYLOR, M.D.,

Instructor in Clinical Gynacology.

University.

GWILLYM G. DAVIS, M.D.,

Assistant Demonstrator of Surgery.

University.

CARL H. REED, M.D.,

Assistant Demonstrator of Morbid Anatomy and Pathological Histologu.

1529 Arch-st.

GEORGE G. MILLIKEN, D.D.S.,

Assistant Demonstrator of Operative Dentistry.

3614 Walnut-st.

CHARLES S. DOLLEY, M.D.,

Instructor in General Biology. WILLIAM B. ROGERS, D.V.S.,

University.

Demonstrator of Veterinary Anatomy.

Demonstrator of Veterinary Anatomy. Westville, N. J.

HUGO A. RENNERT, B.S.,

Instructor in French and German. University.

LOUIS JACK, D.D.S.,

Lecturer on Operative Dentistry.

University.

EDWARD MARTIN, M.D.,

Assistant Instructor of Physical Education.

University.

JOHN B. WEBSTER,

Clerk to the College Faculty. University.

WM. H. SALVADOR,

Clerk to the Faculty of Medicine. University.

JOHN A. REIMOLD,

Clerk to the Faculty of Dentistry. University.

JOHN H. SALVADOR,

Clerk to the Faculty of Veterinary Medicine.

BARCELONA BASS,

Clerk to the Faculty of Biology.

## DEPARTMENT OF DENTISTRY.

#### FACULTY.

WILLIAM PEPPER, M.D., LL.D., Provost and ex-officio President.

CHARLES J. ESSIG, M.D., D.D.S., Professor of Mechanical Dentistry and Metallurgy.

EDWIN T. DARBY, M.D., D.D.S., Professor of Operative Dentistry and Dental Histology.

JAMES TRUMAN, D.D.S., Professor of Dental Pathology, Therapeutics and Materia Medica.—Secretary.

JOSEPH LEIDY, M.D., LL.D., Professor of Anatomy.

- ——, Professor of Physiology,\*

Dr. R. R. UNDERWOOD,

THEODORE G. WORMLEY, M.D., LL.D., Professor of Chemistry.

ROBERT HUEY, D.D.S., Lecturer on Operative Dentistry. LOUIS JACK, D.D.S., Lecturer on Operative Dentistry.

#### CLINICAL INSTRUCTORS.

Dr. C. S. BECK, DR. E. H. NEALL, DR. GEO. W. KLUMP, DR. H. C. REGISTER, DR. W. G. A. BONWILL, DR. W. R. MILLARD,

DR. J. A. WARDELL, DR. J. A. WOODWARD, DR. H. C. LONGNECKER.

#### DEMONSTRATORS.

WM. DIEHL, D.D.S., Demonstrator of Operative Dentistry.

WM. LEWIS CAVE, D.D.S., Demonstrator of Mechanical Dentistry.

J. JUDSON EDWARDS, D.D.S., Assistant Demonstrator of Mechanical Dentistry.

JOSEPH W. NOBLE, D.D.S., Assistant Demonstrator of Operative Dentistry.

LUTHER H. GRAVES, D.D.S., Assistant Demonstrator of Operative Den-

GEO. G. MILLIKEN, D.D.S., Assistant Demonstrator of Operative Dentis-

JOHN MARSHALL, M.D., NAT.Sc.D., Demonstrator of Practical Chem-

JOHN B. DEAVER, M.D., Demonstrator of Anatomy.

<sup>\*</sup> This Course is given by Dr. E. T. Reichert.

#### MATRICULATES.

SECOND YEAR.

Abarca, Filadelfo, Adams, James E., Aguilar, Arturo, Bennefeld, Albert F.,

Borden, Walter A., Bordner, Charles M., Bradley, Wilmot V., Calves, Antonio D., Campbell, John, Chambers, William M., Cookingham, George T., Danel, William W.,

Davis, Charles H., Dennison, James S., Dumas, Victor, Ensign, Charles L., Fuller, Dwight B., Jr., Griffin, Frank R., Hammer, William J., Hammond, Julian T., Jr., Hawke, Wm. Wetherill, Hills, J. Bartlett, Howland, Frank H., Huber, William S., Hurlburt, H. Duane, Lamadriz, Estanislao, Lamoutte, Luis Alfredo, Long, W. Laurence, McIntyre, Alexander A., Maercklein, Bernhard G., Maercklein, Reinhold E., Mergelkamp, Guillermo, Miller, Louis J., Nittinger, Alfred, Paranhos, Josè, Pereira, Francisco, Pitts, John R., Quick, E. Payson, Raupp, Octavio B., Rees, Chas. Hanson, Richter, Charles H., Robson, Thomas C., Schwarzschild, Ferdinand, Seelye, Henry G., Shannon, George H., Smith, Franklin A., Jr., Sumner, Frederick I., Upp, Charles W.,

Rivas, Nicaragua, Paris, Illinois, Leon, Nicaragua, Berlin, Germany,

Allentown, N. J., Berrysburg, New Haven, Conn., Havana, Cuba, Philadelphia, Philadelphia, Lee, Mass., Freeport, Ills.,

New Ipswich, N.H., Geneva, N. Y., Santiago, Cuba, Norwich, N. Y., Philadelphia, Bellefontaine, Ohio, Greensburg, Frankford, Hopewell, N. J., Washington, D. C., Worcester, Mass., Lebanon, St. Albans, Vt., Matanzas, Cuba, Ponce, Porto Rico, Honeybrook, Summerside, P.E.I., Milwaukee, Wis., Milwaukee, Wis., Trujillo, Peru, Huntingdon, Philadelphia, PortoAlegre, Brazil, Primo & Moura. Pelotas, Brazil, Philadelphia, Philadelphia, PortoAlegre, Brazil, Winchester, Ky., Milwaukee, Wis., Philadelphia, Middlebury, Conn., Watertown, N. Y., Philadelphia. Norwich, N.Y., Freeport, Ills.,

University. Ball & Whiteside. University. Professors Miller & Paetsch. University. A. W. Hafer. Elias Strong. University. Goddard & Fox. Wm. Chambers. S. K. Saunders. Kingsley, Allen Sunderland.

H. W. Watkins. C. A. Slocum.  ${
m University.}$ M. O. Randall. G. G. Milliken. A. E. Griffin. University. University. P. J. Wilson. Thos. O. Hills. A. A. Howland. W. A. Huber. University. University. University. H. C. Longnecker. T. H. Heckman. University. B. G. Maercklein. University. University. S. D. Strohm. University. University. Jacob Quick. University. B. G. Rees. R. G. Richter. Thos. Robson. San Francisco, Cal., Univ. of Michigan. Middlebury, Conn., F. E. Howard. J. D. Huntingdon. University. C. G. Sumner. Kingsley, Allen Sunderland.

Webb, Albert T., Wible, John H., Wiggins, Leslie M.,

Amend, Frederick W., Arnold, William F., Bentzen, Michael H., Bowers, George A., Codman, Charles A. E., Darrell, Oliver D., Deming, Fay H., Despecher, Felix J., Doherty, Robert P., Dunn, Thomas J.,

Duthiers, Georges L.,

Elliott, Walter V., Fahnestock, Charles C., Ferguson, Frank L., Fernandez, y Lombard, Emeterio, Garesche, Arthur F., Gibbons, J. Murray, Hall, Carroll, Herbein, Isaac W., Hill, William W., Howe, John B., Hurlock, John, Johnson, W. Howard, Jones, William L., Jr., Keim, Milton N., Meisburger, Louis C. J., Milliken, James A., O'Malley, John F. Outcault, Charles W., Pancoast, Samuel A., Paris, Louis J., Paxson, Alfred, Payne, Ralph G., Pérez, Eduardo A., Powel, Milton, Randall, John W., Reap, Joseph C., Rehfuss, William F., Seip, Howard S. Swing, R. Hamill D., Tees, Ambler, Jr., Uhler, Orandus H., Van Deursen, George L., Wall, Richard J., White, Joseph W., Zayas, Fernando Arturo de,

Freeport, Ills., W. H. Taggart. Z. L. Waugaman. Greensburg, Central Norton, N.B., University. Students of the Second Year, 51.

First Year. Philadelphia, Rochester, N. Y., Bergen, Norway, Nashua, N. H., Philadelphia, Washington, D.C., Sheldon, Vt., Orsay, France, Kingston, N. B., Philadelphia, Port-au-Prince,

Hayti, Mansfield, West Chester, Lena, Ills., Jovellanos, Cuba, Cardenas, Cuba, Brighton, England, Philadelphia, Sinking Spring, Washington, Ga., Ithaca, N. Y., Chestertown, Md., Milton, Philadelphia, Philadelphia, Buffalo, N. Y., Philadelphia, Wilkes-Barre, Lancaster, Ohio, Ashtabula, Ohio, Philadelphia, West Chester, G. G. Cardy Cattaraugus, N. Y., C. J. Ellis. Guayaquil, Ecuador, University. Philadelphia, Norwich, N. Y., Pittston, Philadelphia, Allentown, Coatesville,

Philadelphia,

Hummelstown,

Philadelphia,

Paris, Ills.,

Easton,

University. University. University. Geo. Bowers. University. H. B. Noble, Jr. J. M. Comegys. University. University. University.

University. University. G. G. Cardwell. University. Franc. Cataneo. Geo. H. Chance. S. C. Gibbons. University. H. J. Herbein. J. B. Ficklen. F. S. Howe. J. Jones. U. G. Beck. University. Milton Keim. University. G. G. Milliken. J. McDougall. M. Palmiter. Edw. Kelley. University. G. G. Cardwell. University. A. E. Bradley. J. McDougall. Thos. Robson. University. W. H. Shannon, Ambler Tees. S. P. Uhler. University. J. B. Crist. University. University.

Matanzas, Cuba, Students of the First Year, 46.

Students of the Seco Students of the First	Year	
Total		
	SUMMARY.	
Brazil       3         California       1         Connecticut       2         Cuba       7         District of Columbia       2         Ecuador       1         England       1         France       1         Georgia       1         Germany       1	Hayti       1         Illinois       5         Kentucky       1         Maryland       1         Massachusetts       2         New Brunswick       2         New Hampshire       2         New Jersey       2         New York       9         Nicaragua       2	Norway       1         Ohio       3         Pennsylvania       38         Peru       1         Porto Rico       1         Pr.Edward's Island       1         Vermont       2         Wisconsin       3         Total       97

The Course extends over two years, and in each year there are two Sessions, the Winter and the Spring. By this arrangement, students are spared the necessity of securing a preceptor during their stay in the city; the Faculty deem attendance during the spring and summer months equivalent to private instruction. Such attendance, however, is not to be considered in any way a substitute for the Winter Session.

COURSE OF STUDY.

During the Winter Session the following is the arrangement of studies:

#### FIRST YEAR.

Hour.	Monday.	Tuesday.	Wednesday	Thursday.	Friday.	Saturday.
9 A.M.	General Chemistry.	General Chemistry.				
10 A.M.	Mechanical Clinic.			Mechanical Clinic.	Mechanical Clinic.	
11 A.M.		Chemical Laboratory.	Chemical Laboratory.			
12 M.						
1 P.M.		Operative Clinic.		Operative Clinic.	Operative Clinic.	
2½ P.M.	Operative Clinic.		Operative Clinic.			Clinic.
3½ P.M.		Anatomy.		Anatomy.	Anatomy.	
4½ P.M.	Physiology.		Physiology.		Physiology.	
5½ P.M.	Mechanical Dentistry.	Operative Dentistry.	Metallurgy.	Operative Dentistry.	Dental Pathology, Therapeu- tics and Ma- teria Medica	

The curriculum of the first year is identical for Medical and Dental students as far as Anatomy, Chemistry, and Physiology are concerned.

#### SECOND YEAR.

Hour.	Monday.	Tuesday.	Wednesday	Thursday.	Friday.	Saturday.
9 A.M.	Laboratory of Mechani-	Laboratory of Mechani-		Laboratory of Mechani-	of Mechani-	
10 A.M.	cal Dentis- try, or Operative	cal Dentis- try, or Operative	cal Dentis- try, or Operative	cal Dentis- try, or Operative	try, or Operative	cal Dentis- try, or Operative
11 A.M.	Clinic.	Clinic.	Clinic.	Clinic.	Clinic.	Clinic.
12 M.			Univ. Hosp. Clinics.			
1 P.M.		Operative Clinic.	Operative Clinic.	Operative Clinic.	Operative Clinic.	
2½ P.M.	Operative					Clinic.
3½ P.M.	Clinic.	Anatomy.		Anatomy.	Anatomy.	
4½ P.M.	Physiology.		Physiology.		Physiology.	
5½ P.M.	Mechanical Dentistry.	Operative Dentistry.	Metallurgy.	Operative Dentistry.	Dental Pathology, Therapeu- tics and Ma- teria Medica	

In order to facilitate work in the practical departments, and to give full employment to the student, the morning hours of the first year are devoted equally to dental and chemical laboratory work.

During the second year the student has the entire forenoon of each day for practical dental work. Ample opportunity is afforded for practice in operative and mechanical dentistry.

#### COURSE OF INSTRUCTION.

The lectures on OPERATIVE DENTISTRY AND DENTAL HISTOLOGY embrace the comparative anatomy of the teeth, the functions and microscopical peculiarities of the dental organs, the development of teeth, their component tissues, a full description of the materials and instruments used in operative dentistry, a thorough elucidation of all dental operations, such as filling, extracting, regulating, the pathological relations of the teeth to the other parts of the system, and a minute description of all special diseases related to dental surgery, or of interest to the dentist. The methods taught are demonstrated in clinics.

The instruction in MECHANICAL DENTISTRY AND DENTAL METALLURGY embraces the proper fitting up of a dental laboratory; the use of tools; the melting, refining, alloying and working of metals and alloys used by the dentist; the chemical and physical properties of materials pertaining to ceramic dentistry, their preparation, and the most approved formulas for compounding bodies and enamels for the manufacture of block teeth and continuous gum work; the history and properties of all substances used in

making artificial dentures; as well as the mechanical treatment of cleft palate, including the several methods of constructing obturators for such cases, whether congenital or acquired. The lectures in this department also include every approved mechanical means of correcting irregularities of the teeth, and are amply illustrated by specimens, models, diagrams, and practical application in the laboratory, under the supervision of accomplished mechanical dentists. Special attention will be directed to the higher branches of plate work, the continuous gum process, and carving teeth.

Every student is required to furnish his own bench tools for metal and rubber work, and will be provided with a place in which they can be locked when not in use.

The lectures in CHEMISTRY embrace the study of chemical physics and principles of chemical philosophy, together with a detailed consideration of the principal elementary substances and their compounds, and of the fundamental principles of organic chemistry, including the classification of organic compounds, and the special study of typical members of the different classes. Special attention is also given to the laws of chemical affinity, and the conditions under which they are modified, especially as they relate to the preparation of mixtures and prescriptions.

The course in practical chemistry in the laboratory includes exercises in chemical manipulation, the study of the chemical properties of the principal metals, and the reactions of acids and their combinations, and the general principles of qualitative analysis, especially as they relate to the detection and separation of the metals and compounds which are of interest to practitioners in all branches of medicine. Each student is provided with a separate table and apparatus, and is required to perform all the usual chemical manipulations under the direction of demonstrators, as well as to exhibit by formulas, on paper, all reactions involved in his tests.

Human Anatomy is taught in its relations to all the departments of medicine, including dentistry. The lectures are illustrated by fresh dissections of the human body, and by a rich museum of anatomical specimens, large and well-executed models, and drawings.

The course on PHYSIOLOGY includes lectures, with demonstrations, on the entire human physiology and on physiological chemistry. The study of the physiology of each organ is preceded by a full consideration of its histology. The course is amply illustrated by appropriate diagrams, chemico-physiological experiments, and vivisections.

The lectures on DENTAL PATHOLOGY include such portions of general pathology as have a bearing upon the special subjects taught. Dentition, and its possible pathological results, receives careful attention, followed by a detailed consideration of all the diseases to which the teeth and surrounding parts are liable, the character—normal and abnormal—of the oral se-

cretions, and the direct and remote relations which the pathological conditions of the mouth sustain to other portions of the system.

The treatment required under each head is explained, and the recognized processes by which to secure a return to normal conditions, are minutely detailed.

MATERIA MEDICA will be taught with special reference to the character and value of those remedies that have any bearing upon dental therapeutics.

#### CLINICAL INSTRUCTION.

Four hours daily (except Saturday) are spent in actual practice under the supervision of the Demonstrators. Every student is required to provide his own instruments, except those for extracting. He is expected to keep them in perfect order, and will be provided with a place in which they can be locked when not in use. In the operating room, wires are arranged to a number of the chairs for the use of electric pluggers.

### INFIRMARY AND LABORATORY.

The Infirmary and Laboratory are open to the students for practice, under the supervision of competent demonstrators. During the Winter Session, a Clinical Lecture is given and operations performed by one of the Professors on Saturday.

## THE STILLÉ MEDICAL LIBRARY.

This Library, founded by Professor Alfred Stillé, for the purpose of promoting scientific research and literary culture, contains upwards of four thousand volumes. During the Winter and Spring Sessions it is open to students and graduates of the Dental Department under appropriate regulations.

#### MUSEUM AND CABINETS.

The WISTAR AND HORNER MUSEUM, founded nearly one hundred years ago, and annually augmented, is unequalled in the United States for the number and variety of its specimens of the normal and the morbid anatomy of the human body. It also contains a large number of preparations in Comparative Anatomy, a rich collection relating to Dentistry, such as the different stages of dentition, abnormal conditions of the teeth, mandibles of the lower animals, etc., and an extensive collection of models, which are used in illustrating the course of lectures. It is open every Wednesday and Saturday from 9 A.M. to 12 M., throughout the sessions. The matriculation fee in this Department confers admission to the Museum.

#### SESSIONS.

The Spring Session, 1886, begins on Monday, May 10th, and ends the 15th of June. The work of this session is entirely practical; no lectures are delivered.

The Introductory Session begins on Thursday, September 16th, and is free to those who enter for the winter session.

The Winter Session, 1886-87, begins on Friday, October 1st, 1886, and ends on May 1st, 1887.

#### EXAMINATIONS.

At the close of the first year, examinations in Chemistry and Materia Medica are held, which if the student fail to pass, a second examination is afforded him at the beginning of the next winter session.

The final examination is in Anatomy, Physiology, Operative Denistry, Mechanical Dentistry and Metallurgy, and Dental Pathology and Therapeutics.

Students who have attended one full term in another dental school recognized by the Faculty, will be admitted to the graduating class without examination, upon presentation of the required certificate.

Students holding a medical diploma will be admitted to the Senior Class without examination, but will be required to spend a year in the study of practical Dentistry in the Operative and Mechanical Departments, including the regular winter's course of lectures.

Students who have attended but one course in a medical college will be required to take two winter courses in this Department.

An examination is required for entrance to the Junior year. The requirements of this examination will be a good English education.

Students who have certificates properly attested from colleges, or schools of reputable character, will be accepted without examination; all others must pass an examination in the elements of a good English education.

#### DEGREES.

At the close of the second year, after passing satisfactorily all examinations, the student will receive the degree of Doctor of Dental Surgery (D.D.S.), under the following regulations:

- I. The candidate must be of age, and must have attended two full winter sessions,—the second, in this institution.
- II. He must have dissected at least two parts; and have performed thoroughly and to the satisfaction of the Professor of Operative Dentistry all the usual dental operations; and must undertake at least one artificial case, and bring it completed, with the patient, to the Professor of

Mechanical Dentistry, thirty days before the close of the term; and must prepare for presentation to the Professor of Mechanical Dentistry, before the 1st of April, a specimen case to be deposited in the College collection. The operations as well as the work on the artificial case must be performed at the College building.

Students of Dentistry, who wish the degree of Doctor of Medicine also, can take a three years' course; but they must notify the Secretary of the Department of Medicine of their intention before the beginning of the second session. They must then add to the studies of the second year, Medical Chemistry, General Pathology and Morbid Anatomy, Therapeutics, Theory and Practice of Medicine, Surgery, and Obstetrics, with Clinics, medical and surgical. At the end of this year they are examined in Medical Chemistry, Anatomy, and Physiology, in addition to the dental branches. If qualified, they receive the degree of D.D.S., and pass to the Third year in medicine.

To such graduates the Spring course is open for practice at the chair, or in the dental laboratory, free of additional charge.

In the third year they take the studies of the third year of the medical course, and at the end of the year pass an examination in Therapeutics, General Pathology and Morbid Anatomy, Theory and Practice of Medicine, Surgery, and Obstetrics.

#### TEXT-BOOKS AND WORKS OF REFERENCE.

- On Operative Dentistry and Dental Histology: Harris's Principles and Practice; Tomes's Dental Surgery; Taft's Operative Dentistry; Tomes's Dental Anatomy.
- On Mechanical Dentistry and Metallurgy: Richardson's Mechanical Dentistry; Wildman's Instruction in Vulcanite Work; Kingsley's Oral Deformities; Essig's Dental Metallurgy.
- On Anatomy: Leidy's Elementary Treatise on Human Anatomy; Gray's Anatomy; Stricker's Manual of Histology.
- Dental Follicle: Legros and Magitot, translated by M. S. Dean.
- On Chemistry: Fownes's or Wurtz's Chemistry; Wormley's Micro-Chemistry of Poisons; Muter's Analytical Chemistry.
- On Physiology: Foster's Physiology with Frey's Compendium of Histology; Tyson's Cell Doctrine; Carpenter's Physiology, by Smith.
- On Materia Medica: H. C. Wood's Therapeutics; Geo. B. Wood's Therapeutics; Wood and Bache's Dispensatory.
- On Surgery: Agnew's Surgery; Ashhurst's Surgery; Billroth's Surgical Pathology.

#### EXPENSES.

#### FIRST YEAR.

Matriculation Fee
General ticket, Winter Session
\$105 00
SECOND YEAR. DENTISTRY ONLY.
General ticket, Winter Session
Dissecting ticket (required)
Graduation
\$140 00 Total fees for the two courses in dentistry, including graduation $$245 00$
SECOND YEAR. DENTISTRY AND MEDICINE.
Matriculation in Medical Department
Tuition for joint medical and dental studies
THIRD YEAR. (MEDICINE.)
General ticket

Third year medical students who have graduated in the Department of Dentistry are entitled to the use of the Operative Clinics and the Dental Laboratory free of charge.

Further information may be obtained from

JAMES TRUMAN, Secretary, 3249 Chestnut Street, Philadelphia, Pa.

The subjoined reports give some conception of the character, and of the mass of work performed in the Operative and Mechanical Departments; but the amount of costly material and of careful attention necessary for the insertion of 4380 gold fillings can be appreciated only by the experienced operator. The packing of seventy-two ounces of gold, used during the session, represents a very large amount of valuable work performed.

The number of patients (4898), exhibits not only a gratifying confidence in the management of these departments, but also the value of the service to a large class of persons of limited means.

#### DENTISTRY—OPERATIONS.

## OPERATIVE DEPARTMENT.

Number of Patients 4898	
Gold Fillings	380
	355
Cement "	941
Amalgam "	132
Gutta Percha"	561
Canal "	150
Pulps capped	91
" devitalized	47
" extracted	56
Artificial Crowns	38
Pulpitis	12
Treatment Pulp Canals	221
Pericementitis	05
Alveolar Abscess	53
Inflammation of Gums	91
Pyorrhœa Alveolaris	32
Irregularities Corrected	24
Salivary Calculi	102
	241
Total 11 (	
Total, 11,0	132
MECHANICAL DEPARTMENT.	
Number of patients 313	
Full cases	60
Partial "	12
Pivot teeth	42
Repairing cases	12
Regulating "	3
m . 1	
Total,	92

#### GRADUATES, 1885.

At the Annual Commencement held May 1, 1885 at the American Academy of Music, the degree of Doctor of Dental Surgery was conferred by William Pepper, M.D., LL.D., Provost, upon the following gentlemen:—

Allen, William Y., Bailey, Edgar C., Bellis, Edward R., Bromley, Frederick W., M.D., Bruns, Augustus, Carter, Ditson P., Couto, William S., Crissman, Ira B., Dayton, Chas. Elmer, Dick, George W. C., Dickinson, Edward B., Ehni, Robert F., Englert, G. Ægidius, Erskine, George W., Fergus, Oswald, L.D.S., Fisher, Frank W., Fridman, Andreas, Gibbons, Clifford, Gibbons, John F., Ginoyer, Louis, Hayward, Thaddeus T., Hertz, John C., Howe, Edward D., Hugenschmidt, Arthur C., Jack, L. Foster, M.D., Jones, Victor S., Knapp, Frank C., Long, William R., Marsh, Adelbert W., Mercer, Charles J., Milliken, George G., Milliken, Charles T., Munroe, Grafton, Parker, Edwin G., Peardon, Edwin, Roett, Clarence F.,

Boston, Mass. Macon, Ga. Richmond, Ind. Palmyra, Wis. Hanover, Germany. Proctorville, Ohio. Saó Paulo, Brazil. Freeport, Ill. Stamford, Conn. Sumter, S. C. Chicopee, Mass. Toledo, Ohio. Orange, N. J. Philadelphia. Glasgow, Scotland. Syracuse, N. Y. Dalarne, Sweden. Brighton, England. Brighton, England. Saó Paulo, Brazil. Minneapolis, Minn. Hazelton. Hollis, N. H. Paris, France. Philadelphia. Bethlehem. Bradford, N. Y. Connellsville. Constantia, N. Y. Kennet Square. Philadelphia. Sacramento, Cal. Annapolis, Md. Watertown, N. Y. Palmyra, Wis. Barbadoes, W. I.

Roque, José,	Matanzas, Cuba.
Ryan, George B.,	Sussex, Canada.
Schmidt, John A.,	Ilion, N. Y.
Shaw, Louis,	Philadelphia.
Smith, Chas. Elmer,	Davenport, Iowa.
Smith, W. Albert,	Salida, Col.
Southwell, Claude A.,	Milwaukee, Wis.
Southworth, Ernest L.,	Sacramento, Cal.
Stapleton, J. Walter,	Winchester, Ky.
Starr, R. Walter,	Philadelphia.
Stine, Henry M.,	Harrisburg.
Wells, George H.,	N. Hatfield, Mass.
Winner, William L.,	Williamsport.

#### SUMMARY.

Barbadoes, W. I.,		1	Maryland, 1
Brazil,		$^2$	Massachusetts, 3
California,		2	Minnesota, 1
Canada,	·	1	New Hampshire, 1
Colorado,		1	New Jersey, 1
Connecticut,		1	New York, 5
Cuba,		1	Ohio, 2
England,		2	Pennsylvania, 11
France,		1	Scotland, 1
Georgia,		1	South Carolina, 1
Germany,		1	Sweden, 1
Illinois,		1	Wisconsin, 3
Indiana,		1	_
Iowa,		1	Total 49
Kentucky,			

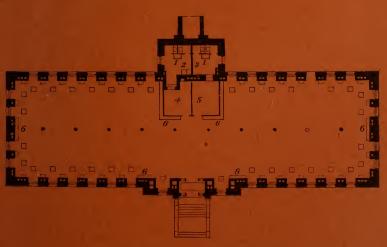
## In the Faculty of Dentistry, at the examination for Degrees— Honorable Mention for averages exceeding 90, to—

Grafton Munroe,	Md.	Ditson P. Carter,	Ohio.
George G. Milliken,	Penna.	Frank W. Fisher,	N. Y.
Chas. T. Milliken,	Cal.	L. Foster Jack, M.D.,	Penna.
Augustus Bruns,	Germany.	Frank C. Knapp,	N. Y.
Louis Shaw,	Penna.	Thaddeus T. Hayward,	Minn.
George H. Wells,	Mass.	William R. Long,	Penna.
Victor S. Jones,	Penna.	William L. Winner,	Penna.
Charles J. Mercer,	Penna.	Edgar C. Bailey,	Ga.
Edwin G. Parker,	N. Y.	Henry M. Stine.	Pa.
John A. Schmidt,	N. Y.		





BUILDING ERECTED FOR THE ACCOMMODATION OF THE OPERATIVE CLINICS AND CHEMICAL LABORATORIES.



PLAN OF DENTAL OPERATING ROOM.



UNIVERSITY OF PENNSYLVANIA COLLEGIATE AND SCIENTIFIC DIPARTMENTS.